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APPLICATION NO. **FILING DATE** FIRST NAMED INVENTOR ATTORNEY DOCKET NO 09/583,654 05/30/00 AHLGREN K D-41939-10 **EXAMINER** IM22/1003 W R GRACE & CO CONN TARAZANO, D PO BOX 464 DUNCAN SC 29334 **ART UNIT** PAPER NUMBER 1773 **DATE MAILED:** 

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

10/03/00

Application No.

09/583,654

Appli t(

Ahlgren et al.

Office Action Summary Exam

Examiner

D. Lawrence Tarazano

Group Art Unit 1773



Responsive to communication(s) filed on	
☐ This action is <b>FINAL</b> .	
Since this application is in condition for allowance exce in accordance with the practice under Ex parte Quayle	ept for formal matters, prosecution as to the merits is closed , 1935 C.D. 11; 453 O.G. 213.
is longer, from the mailing date of this communication. Fa	s set to expire <u>3</u> month(s), or thirty days, whichever ailure to respond within the period for response will cause the xtensions of time may be obtained under the provisions of
Disposition of Claims	
X Claim(s) <u>1-6</u>	is/are pending in the application.
Of the above, claim(s)	is/are withdrawn from consideration.
☐ Claim(s)	
Claim(s)	
	are subject to restriction or election requirement.
Application Papers  See the attached Notice of Draftsperson's Patent D	rawing Review PTO-949
☐ The drawing(s) filed on is/are	
☐ The proposed drawing correction, filed on	is Dapproved Disapproved.
☐ The specification is objected to by the Examiner.	
☐ The oath or declaration is objected to by the Exami	ner.
Priority under 35 U.S.C. § 119	
Acknowledgement is made of a claim for foreign pr	·
	pies of the priority documents have been
received.	Col Millow Road
received in Application No. (Series Code/Seri	
received in this national stage application from	
*Certified copies not received:  Acknowledgement is made of a claim for domestic	priority under 35 II S C § 119(a)
Acknowledgement is made of a claim for domestic	priority under 33 0.3.c. 3 113(6).
Attachment(s)	• •
Notice of References Cited, PTO-892     Information Displayure Statement/s), PTO 1449, Pro	nor No(c)
<ul><li>☐ Information Disclosure Statement(s), PTO-1449, Pa</li><li>☐ Interview Summary, PTO-413</li></ul>	ibe: IAO(2):
☐ Notice of Draftsperson's Patent Drawing Review, P	TO-948
□ Notice of Informal Patent Application, PTO-152	
SEE DEFICE ACTION	N ON THE FOLLOWING PAGES

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**DETAILED ACTION** 

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded

in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise

extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple

assignees. See In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759

F.d. 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.d. 937, 214 USPQ 761 (CCPA

1982); In re Voges, 422 F.d. 438, 164 USPQ 619 (CCPA 1970); and, In re Thorington, 418 F.d. 528,

163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to

overcome an actual or provisional rejection based on a nonstatutory double patenting ground

provided the conflicting application or patent is shown to be commonly owned with this application.

See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal

disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-6 are rejected under the judicially created doctrine of obviousness-type double

patenting as being unpatentable over claims 1-3, of U.S. Patent No. (5,604,043).

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The instant application claims a film comprising a ethylene / alpha-olefin copolymer having limited long chain branching in which the more limiting claims recite that: the film is heat shrinkable,

multilayer, in which said copolymer is mixed with a second thermoplastic polymer or copolymer, that

the film is a multilayer structure, or that said copolymer has a density in the range of 0.86 g/cc to

about 0.95 g/cc.

5,604,043 claims a multilayer film in which the core layer comprises a ethylene / alpha-olefin

copolymer having limited long chain branching having a density in the range of 0.89 g/cc to about

0.91 g/cc.

The subject matter as a whole would have been obvious to one having ordinary skill in the art

at the time the invention was made, since it has been held that choosing the over lapping portion, of

the range taught in the allowed patent and the range claimed by the applicant, has been held to be

a prima facie case of obviousness, see In re Malagari, 182 USPQ 549 so as to produce a multilayer

heat shrinkable film comprising ethylene / alpha-olefin copolymer having limited long chain branching

having a density in the range of 0.89 g/cc to about 0.91 g/cc in any layer, including the core layer.

Specification

3. The disclosure is objected to because of the following informalities: On page 7, lines 2 the

word "Zigler" is misspelled.

Appropriate correction is required.

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4. A substitute specification is required pursuant to 37 CFR 1.125(a) because the margins are

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not proper; the top lines on each of the pages are now illegible since words have been obliterated by

the holes used to attach the specification to the file wrapper. Each sheet must have a top margin of

at least 2.0 cm (3/4 inch). a left side margin of at least 2.5 cm (1 inch), a right side margin of at least

2.0 cm (3/4 inch) and a bottom margin of at least 2.0 cm (3/4) 37 CFR 1.52.

A substitute specification filed under 37 CFR 1.125(a) must only contain subject matter from

the original specification and any previously entered amendment under 37 CFR 1.121. If the

substitute specification contains additional subject matter not of record, the substitute specification

must be filed under 37 CFR 1.125(b) and must be accompanied by: 1) a statement that the substitute

specification contains no new matter; and 2) a marked-up copy showing the amendments to be made

via the substitute specification relative to the specification at the time the substitute specification is

filed.

Claim Rejections - 35 USC § 112

5. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing

to particularly point out and distinctly claim the subject matter which applicant regards as the

invention.

The term "limited" in claim 1 is a relative term which renders the claim indefinite. The term

"limited" is not defined by the claim, the specification does not provide a standard for ascertaining

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the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope

of the invention. It is not clear what amount of long chain branching would be included or precluded

by the applicants claims.

Regarding claim 3, it is not clear if claim 3 should depend from claim 1 or claim 2 since it

recites that the film is heat shrinkable which is a feature of claim 2. Claim 1 is silent regarding this

feature.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled

the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the

applicant for patent.

7. Claims 1, 3, 4, and 5 rejected under 35 U.S.C. 102(e) as being anticipated by Lai et al.

(5,278,272).

Lai et al. teach ethylene-alpha olefin polymers having long chain branching (column 3, lines

56+) produced by single site cyclopentadienyl metal catalysts (column 8, lines 10+ and 55+). These

ethylene-alpha olefins are produced into blown films, which the polymers are formed into stable

bubbles during the blowing process (column 17, lines 20+). Lai et al. further teach that the polymers

of their invention can be produced into useful articles such as films using conventional processing

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techniques (column 15, lines 20+) and that blends (column 17, lines 47+) containing said polymers

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can also be formed into such articles (column 17, lines 64-68). The examples show polymers having

densities of 0.870 g/cc, which is within the range claimed by the applicant.

8. Claims 1, 3, 4, and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Lai et al.

(5,272,236).

Lai et al. teach blown films produced from substantially linear ethylene / alpha-olefin

copolymers having long chain branching (column 3, lines 25-63), (column 20, lines 45+ and column

21). These films can be fabricated using conventional processing techniques (column 15, lines 64+).

They further teach that blends containing a second polymer also be formed into conventional

structures (e.g. films).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary

skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the

invention was made.

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10. Claim 1-6 rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller et al. (4,532,189) in view of Lai et al. (5,272,236).

Mueller et al. teach heat shrinkable multi-layer films comprising LLDPE wherein DOWLEX 2054 is a commercially available LLDPE (examples I, II, and III). Moreover, example II shows LLDPE blended with ethylene vinyl acetate used in the core layer of a multilayer film. Furthermore, these films have improved optical properties (column 1, lines 13+)

Lai et al. teach a substantially linear polyethylene having long chain branching that has superior properties to conventional polyethylenes. Lai et al. compare one commercially available material, DOWLEX 2054, to the polymers of their invention (see examples 7-9). Lai et al state that the polymers of their invention are superior to conventional polyethylene polymers in terms of gloss, haze and clarity (see examples 10-13). Lai et al. further suggest that resins of their invention would be useful in the production of films (column 20, lines 48+) and useful in blends (column 14, lines 10-54).

It would have been obvious to one having ordinary skill in the art a the time the invention was made to use substantially linear olefin polymers of the type taught by Lai et al. in place of the LLDPE, used in the films taught by Mueller, in order to produce a film having higher gloss, lower haze, and better clarity which could be more easily produced.

11. Claims 2 and 3 rejected under 35 U.S.C. 103(a) as being unpatentable over Lai et al. (5,272,236) or (5,278,272) in view of Baird Jr et al. (3,022,543).

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Lai et al. (5,272,236) or (5,278,272) teach blown films as discussed above. While each Lai

et al. patent teach blown films, they do not specifically teach the production of blown shrinkable films.

Baird Jr. et al. teach methods of producing shrinkable polyethylene films by blown bubble

techniques.

It would have been obvious to one having ordinary skill in the art at the time the invention

was made to have used the orientation methods taught by Baird Jr. et al. to orient the ethylene /

alpha-olefin (polyethylene) films taught by either Lai et al. so as to produce shrinkable polyethylene

films useful in packing applications.

**Conclusion** 

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to D. Lawrence Tarazano whose telephone number is (703) 308-2379. The

examiner can normally be reached on M-F from 8:30 am to 5:30 pm.

The official fax number for the art unit is (703)-305-3599. The special fax number for

amendments after final is (703)-305-5408. The number for unofficial faxes is (703)-305-5436.

D. Lawrence Tarazano

Patent Examiner

Paul Thibodeau Supervisory Patent Examiner

Thirlean

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Technology Center 1700

September 28, 2000